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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/624,512	07/23/2003	Shinichi Kondo	Q76668	7418

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EXAMINER

MULLIS, JEFFREY C

ART UNIT PAPER NUMBER

1711

DATE MAILED: 12/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/624,512

Applicant(s)

KONDO ET AL.

Examiner

Jeffrey C. Mullis

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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A person shall be entitled to a patent unless –

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mori et al. (WO 03/014174) in view of Li Ming (Chinese patent 1336390), newly cited by applicants.

It is noted that Mori WO '74 corresponds to 2004/0204537 which is the US national stage application of Mori WO '74 and the two documents are therefore presumable identical except for language. Therefore reference will be made to Mori US 2004/0204537 .

Mori discloses a composition which is a grafted "olefin based copolymer" abstract such as a copolymer of ethylene and vinylcyclohexane (paragraph 34). Note the Examples for applicants molar amounts of vinylcyclohexane. Use of peroxides are disclosed in paragraph 47. No examples exist of grafting of ethylene vinylcyclohexane with applicants monomers but choice of such would have been obvious to a practitioner having an ordinary skill in the art at the time of the invention in the expectation of adequate results, absent any showing of surprising or unexpected results. Ming discloses a melt grafting process for polyolefins using applicants' concentrations (see the Examples), which has the benefit of high grafting rate and low insolubles production. Note the paragraph bridging pages 3 and 4 in this re. While applicants specific

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concentrations for use in melt grafting are not disclosed by the primary reference, it would have been obvious to a practitioner having an ordinary skill in the art at the time of the invention to use the conditions of the secondary reference to graft the olefin copolymers of the primary reference to extend the benefits of the primary reference to the primary reference absent any showing of surprising or unexpected results.

Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

Claims 1-3 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oi et al (EP1 197 501), newly cited by applicants in view of Rodriguez et al. (US 6,221,967).

Oi discloses an adhesive or laminate which may include ethylene vinylcyclohexane copolymer (patent claim 5).

Rodriguez discloses modification of polyolefins to improve adhesion (column 1, lines 5-25) using a process identical to applicants except that the olefin polymer used is not applicants ethylene vinylcyclohexane polymer. Note Example 2 of the patent in this re. While the primary reference does not disclose melt grafting of their polymer, use of the process of the secondary reference to melt graft the product of the primary reference would have been obvious to a practitioner having an ordinary skill in the art at the time of the invention in the expectation of extending the benefit of improved adhesion from

the primary to the secondary reference absent any showing of surprising or unexpected results.

Applicant's arguments filed 11-17-06 have been fully considered but they are not persuasive. With re to the rejection of Mori in view of Li Ming, the "deficiencies of Mori" referred to by applicants are in fact acknowledged by the examiner in the above rejection. Such deficiencies are rectified by Li Ming despite applicants statement to the contrary which, except with re to reaction time is merely conclusionary. With re to Li Mings reaction time, choice of any of patentees' times of 5-15 minutes meets kneading time limitation of the claims. No selection of any particular value is needed and applicants reliance on Atofina v. Great Lakes (where selection of a particular temperature from the reference was required) is therefore misplaced. This is so because a reaction time of 15 minutes necessarily requires a reaction time of 5 minutes (as well as all times of less than 5 minutes) prior to reaching a time of 15. Thus applicants could present a proper dependent claim which recited that additional melt kneading of 10 minutes took place after the kneading time of 5 minutes. In contrast to Atofina, a process temperature of for instance 500 degrees would be contrary to a temperature of for instance less than 400 degrees centigrade. A single disclosed process time in an example of a process necessarily encompasses all lesser time values as it is not possible to reach a higher value of process time without passing through the lower values of time. Applicants remarks regarding decomposition or insufficient reaction, thus rely on limitations not present in the claims but in any case insufficient reaction and decomposition are expected consequences of too long or too

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short reaction times. In any case even if applicants do not agree, Li Mings' reaction time overlaps with applicants at 5 minutes. As set out in the advisory action, if applicants wish to distinguish over Li Ming based on kneading time, it is suggested that some action not suggested by the prior art be recited at kneading times of 0.5 to less than 5 minutes such as terminating any kneading or reaction which may be occurring or working up or molding, etc. Otherwise applicants claims read on processes in which kneading continues to take place after applicants 5 minute kneading time. Applicants should of course point out support for any amendment they make.

With re to the rejection relying on Oi in view of Rodriguez applicants discussion of the various deficiencies of each reference are admitted by the examiner in the above rejection. Applicants discussion of the deficiencies of each reference in isolation does not address the reasons for the examiner's proposed modification of Oi. Rodriguez discloses reaction of polyolefin (a term encompassing the ethylene vinylcyclohexane of Oi) with applicants components "B" and "C" and thus Rodriguez is reference which suggests applicants ratio of "A", "B" and "C" in that Rodriguez discloses specific ratios of polyolefin, "B" and "C" which are suitable to produce the desirable end result of a modified resin.

Any inquiry concerning this communication should be directed to Jeffrey C. Mullis M-F, 9-5 pm at telephone number 571 272 1075.

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Jeffrey C. Mullis
J Mullis
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JCM

11-4-06

Jeffrey Mullis
Primary Examiner
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A handwritten signature in black ink, appearing to be 'JCM', located below the printed name and title of Jeffrey Mullis.